

What is claimed is:

1. A lighting device that illuminates an object from a light source, comprising:
 - a housing having at least one inner surface portion that is diffusely reflective;
 - an aperture disposed in the housing, the aperture aligned with the light source;
 - 5 a diffuser disposed between the light source and the object; and
 - a reflector disposed adjacent the aperture between the light source and the diffuser
2. The lighting device of claim 1 wherein the light source has illumination, wherein:
 - the reflector is constructed and arranged to intercept the illumination from the light source;
 - 10 the diffusively reflective inner surface portion of the housing is constructed and arranged to reflect the illumination intercepted by the reflector; and
 - the diffuser is constructed and arranged to receive the illumination reflected by the diffusively reflective inner surface of the housing.
3. The lighting device of claim 1 wherein the light source has illumination and wherein
 - 15 the reflector and diffusely reflective inner surface portion are constructed and arranged to reflect substantially all the reflected first portion of the illumination onto the object being illuminated as indirect side lighting, with respect to an observation axis of an image capture device capturing an image of the object.
4. The lighting device of claim 3, wherein the lighting device is constructed and arranged
 - 20 to substantially reduce a visible shadow of the object on a backdrop in an image captured by the image capture device;
 - the shadow being formed by the object intercepting light from the light source; and
 - the backdrop being positioned such that the object is disposed between the backdrop and the light source.
- 25 5. The lighting device of claim 4 wherein the shadow is substantially located behind the object with respect to the image capture device.

6. The lighting device of claim 1 wherein the reflector comprises a mirror aligned with respect to the light source to reflect a portion of the light towards the diffusely reflective inner surface and onto the object.
7. The lighting device of claim 1 wherein the diffuser comprises a substantially translucent panel capable of diffusing light passing through the panel.
5
8. The lighting device of claim 7 wherein the translucent panel comprises a diffusing synthetic plastic material.
9. The lighting device of claim 1 wherein the light source emits a plurality of light rays and wherein the diffuser is positioned to intercept at least a portion of the light rays
10 from the light source within a predetermined steradian angle directed toward the object.
10. The lighting device of claim 9 wherein the diffuser is positioned to intercept substantially all the light rays from the light source within a predetermined steradian angle directed towards the object.
11. The lighting device of claim 1 wherein the light source has an exit aperture plane and
15 wherein the reflector comprises at least two mirrors disposed orthogonal to each other, each mirror disposed at an angle of approximately 45 degrees with respect to the exit aperture plane of the light source.
12. The lighting device of claim 11 wherein the at least two mirrors intercept at least fifty percent of the illumination from the light source passing through the aperture.
- 20 13. The lighting device of claim 1 wherein the housing includes a substantially concave portion.
14. The lighting device of claim 1 wherein the object being illuminated has a width and wherein the diffuser has a width greater than the width of the object.
15. The lighting device of claim 1 wherein the housing is disposed between the light source
25 and the object.

16. A lighting device for illuminating an object comprising:

- a housing having an inner surface, at least a portion of the inner surface being diffusely reflective;
- a light source disposed in the housing;
- 5 a diffuser positioned between the light source and the object; and
- reflector disposed adjacent the aperture between the light source and the diffuser.

17. The lighting device of claim 16 wherein the light source comprises a strobe.

18. The lighting device of claim 17 wherein the light source further comprises a strobe diffuser operably coupled to on the strobe.

10 19. A method of illuminating an object with a light source and capturing an image of the object with an image capture device, the method comprising:

- providing a diffuser that diffuses light directed directly toward the object; and
- reflecting a portion of the light from the light source for illuminating the object such that substantially all the shadows within the field of view of the image capture device

15 are located behind the object.

20. The method of claim 19 further comprising:

- providing a backdrop behind the object; and
- wherein reflecting a portion of the light comprises providing a pair of mirrors for reflecting a portion of the illumination from the light source off a diffusely reflective

20 surface onto the object.

21. The method of claim 19 wherein the light source is a strobe.

22. A lighting device for illuminating an object from a light source so that an image capture device can capture an image of the object, comprising:

- a light source; and
- 25 means for illuminating the object such that substantially all shadows of the object within the field of view of the image capture device are located behind the object.

23. A lighting device for illuminating an object from a light source so that an image capture device can capture an image of the object, comprising:

a light source; and

means for converting the light from the light source into indirect side lighting directed onto the object, whereby at least a portion of the visible shadows of the object are reduced.

24. The lighting device of claim 23, wherein the object to be illuminated is disposed adjacent to a backdrop and wherein the means for converting reduces at least a portion of the shadows of the object that would appear on the backdrop in an image captured by the image capture device.

10 25. The lighting device of claim 1 wherein the housing and the diffuser are integrally formed.

26. The lighting device of claim 16 wherein the housing and the diffuser are integrally formed.

15 27. A system that captures an image of an object, comprising:

a lighting device that illuminates the object from a light source, the lighting device comprising:

a housing having at least one inner surface portion that is diffusely reflective;

20 an aperture disposed in the housing, the aperture aligned with the light source;

a diffuser disposed between the light source and the object; and

a reflector disposed adjacent the aperture between the light source and the diffuser; and

25 an image capture device constructed and arranged to acquire an image of an object that has been illuminated by the lighting device.

28. The system of claim 27 wherein the lighting device is constructed and arranged to provide indirect side lighting to the object to reduce visible shadows of the object in images captured by the image capture device.

29. The system of claim 27 wherein the lighting device is constructed and arranged to have
5 a substantially compact size.

30. The lighting device of claim 4 wherein the shadow is substantially located below the object with respect to the image capture device.

31. A method of capturing an image of an object, comprising:

10 directing light from a light source directly towards the object;
diffusing the light directed directly toward the object;
reflecting a portion of the light from the light source for illuminating the object such
that substantially all the shadows within the field of view of the image capture device
are located behind the object; and
capturing an image of the object having substantially reduced shadows, using an
15 image capture device.